

Amendments to the Claims and Listing of Claims

In accordance with 37 CFR §1.116(b)(1), please cancel claims 6, 16, 17, and 22-27, without prejudice to their prosecution in a subsequent continuation application. The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(previously presented)** An apparatus comprising:
 - a variable acoustic source acoustically coupled to a volume, the volume being divided into an air region and a fluid region, the fluid region having a fluid output;
 - a microphone acoustically coupled to the volume;
 - a first processor configured to receive a signal from the microphone, and further configured to determine a volume of the air region;
 - a fluid valve configured to allow an amount of fluid to exit the fluid region, the amount of fluid being associated with the determined volume of the air region; and
 - an atomizer coupled to the fluid output, the atomizer configured to aerosolize at least a portion of the amount of fluid to exit the fluid region.

2. **(original)** The apparatus of claim 1, further comprising a volume sensor configured to output a first signal associated with a volume of the aerosol, and wherein the amount of fluid to exit the fluid region is further associated with the signal associated with the volume of the aerosol.

3. **(original)** The apparatus of claim 1, further comprising a second processor configured to calculate a volume of the aerosolized fluid and configured to output a volume signal associated with the calculated volume, and wherein the amount of fluid to exit the region is further associated with the volume signal.

4. **(original)** The apparatus of claim 2, further comprising a second processor configured to receive the first signal, calculate a volume of the aerosolized fluid, and output a second signal associated with the calculated volume, wherein the amount of fluid is further associated with the second signal.

5. **(original)** The apparatus of claim 1, wherein the first processor is further configured to send a control signal to the fluid valve.

6. **(original)** The apparatus of claim 5, further comprising:
 a target region coupled to the fluid valve and in selective communication with an air tank through an air valve.

7. **(original)** The apparatus of claim 6, wherein the first processor is further configured to send a control signal to the air valve.

8. **(canceled)**

9. (original) The apparatus of claim 8, wherein the valve is in communication with an atomizer.

10. (previously presented) The apparatus of claim 9, further comprising:

a light source and light detector, the detector configured to output a signal associated with light scattering from the aerosol;

a flow rate sensor configured to output a signal associated with a flow rate of the aerosol; and

wherein the calculation of the aerosol volume is associated with the output signal from the light detector and with the output signal from the pressure sensor.

11-14. (canceled)

15. (previously presented) An apparatus comprising:

means for dispensing a first fluid;

means for aerosolizing the first fluid in communication with the means for dispensing the first fluid;

means for determining aerosol volume coupled to the means for aerosolizing the first fluid;

wherein the means for dispensing the first fluid includes a means for metering a second fluid based on the signal associated with the aerosol volume, and further based on an acoustic property of the means for dispensing the first fluid.

16 - 18. (canceled)

19. (previously presented) A method comprising:

metering a first fluid using an acoustic volume transducer;

converting the first fluid to an aerosol;

calculating a volume of the aerosol;

receiving a signal associated with the calculated volume; and

metering a second fluid using an acoustic volume transducer, the metering being based on the received signal.

20. (canceled)

21. (previously presented) A medium storing instructions to cause a processor to

meter a first fluid using an acoustic volume transducer;

convert the first fluid to an aerosol;

calculate a volume of the aerosol;

receive a signal associated with the calculated volume; and

meter a second fluid using an acoustic volume transducer, the metering being based on the received signal.

22-27. (canceled)